

Kerala Gazette No. 19 dated 11th May 2010.

**PART I**



GOVERNMENT OF KERALA

**Abstract**

WRD—CHITTURPUZHA IRRIGATION PROJECT—RULES FOR THE REGULATION AND  
DISTRIBUTION OF WATER—AMENDED—ORDERS ISSUED

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WATER RESOURCES (MP) DEPARTMENT

G. O. (Ms.) No. 15/2010/WRD. *Dated, Thiruvananthapuram, 20th February 2010.*

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*Read:—*1. G. O. (Ms.) No. 3/87/Im dated 24-1-1987.

2. Letter No. WP4/9926/84 dated 3-2-2010 from Chief Engineer,  
Cauvery Cell, Kozhikode.

ORDER

The following notification shall be published in the Kerala Gazette for  
General information.

NOTIFICATION

The appended rules for the Regulation and Distribution of Water for  
Chitturpuzha Irrigation Project amending the Government Order read above are  
approved by Government. The Rules shall come into force immediately.

By order of the Governor,

DR. A. JAYATHILAK,  
*Secretary to Government.*

To

The Chief Engineer, Cauvery Cell, Kozhikode

## **RULES FOR THE REGULATION AND DISTRIBUTION OF WATER FOR CHITTURPUZHA IRRIGATION PROJECT, 2010**

1. These rules shall be called “the rules for Regulation and Distribution of water for Chitturpuzha Irrigation Project, 2010”.

2. The rules shall apply to the whole of the Chitturpuzha Irrigation Project. Comprising the following components and the ayacut.

- (1) The Moolathara Regulator
- (2) The Moolathara left bank canal system.
- (3) The Moolathara right bank canal system.
- (4) The Kunnamkattupathy canal system.
- (5) The Thembaramadakku canal system.
- (6) The Nurnee System.
- (7) The Nurnee-Alankadavu system.
- (8) Meenakshipuram Lift Irrigation System
- (9) Venkalakayam Reservoir
- (10) Kunnampidari Eri
- (11) Kunnamkattupathi regulator

The ayacut shall comprise of all the area approved as such by the District Collector, Palakkad, under the relevant provisions of T.C. or Madras Irrigation Acts and/or The Kerala Irrigation and Water Conservation Act, 2003 as applicable to the areas concerned.

3. The Chitturpuzha Project has been formulated to utilize the assured supply of 7.250 TMC of water a year as per clause 4 (a) in Schedule-II of the Parambikulam-Aliyar Project Agreement 1970. Even though there is no storage reservoir in Kerala for this project, water is supplied at Manakkadavu by the Tamil Nadu Government on a regulated supply pattern agreed between the Government of Tamil Nadu and Kerala (Vide agreement dated 29-5-1970 between Government of Kerala and Tamil Nadu). The water will be measured at Manakkadavu weir, 3 km. Upstream of the Moolathara Regulator jointly by the officers of both Government.

4. The Project Advisory Committee shall be constituted for all irrigation projects in the State as per G.O. (Ms) No. 3/2008/WRD dated 2-2-2008. As per this Government Order District Collector will be the Chairman and the Executive Engineer will be the convener of the Committee. The committee shall consist of Member of Parliament of the area, Members of Legislative Assembly, President of Panchayats in the Project Area, one representative from each canal committee, District Officer of Agricultural Department, District Officer of Co-operative Department and five representatives nominated by Government from among prominent persons representing the agricultural sector as members. In addition to the above Executive Engineer, KKIP division, Kozhinjampara and Joint Director, JWRB Division, Palakkad will also be members in this committee. This committee shall be advising the Executive Engineer on matters pertaining to crop pattern, fixing Irrigation Calendar including the preparation of turn system for water distribution pattern. The PAC will meet at least twice in a year preferably in April before start of 1st crop and in August before the start of the 2nd crop.

5. There shall be 11 canal committees for the project as detailed below :

- (1) Moolathara Left Bank Canal Systems—4 Nos.  
(one each for canals under the jurisdiction of Section 1/II, 2/II, 3/II and 4/II)
- (2) Moolathara Right Bank Canal Systems—2 Nos.  
(one each for the Ayacut of VV branch canal and extended portion of MRBC)
- (3) Kunnamkattupathy Canal System—1 No.
- (4) Thembaramadakku Canal System—2 Nos.  
(one each for the canals under the jurisdiction of Section 1/I and 2/I)
- (5) Nurnee and Nurnee Alankadavu System—1 No.
- (6) Meenakshipuram Lift Irrigation System—1 No.

Each canal committee shall have Assistant Executive Engineer as convener, Agriculture Officer of the area, officer of the co-operative department, Presidents of the Beneficiary Committees of farmers at outlet-level and one representative from credit agency (Bank etc.) as members. The Assistant Executive Engineer concerned shall elect the representative member to the Project Advisory Committee from each canal committee every year in the month of April before the commencement of First crop.

6. In the rules, the Executive Engineer, Assistant Executive Engineer and the Assistant Engineer shall mean the Executive Engineer, Assistant Executive Engineer and the Assistant Engineers in charge of the Chitturpuzha Irrigation Project.

7. The Executive Engineer shall have the overall control of the Project. The jurisdiction and the responsibilities of the subordinate officers other than those indicated in these rules shall be fixed by the Executive Engineer in consultation with his superiors, wherever necessary. Project Advisory Committee shall be the final authority in all the matters connected with water distribution of this project.

As Chitturpuzha Project is not having any storage facility, water for distribution depends on the water released by Tamil Nadu. If there is any shortfall in the supply from the mutually agreed pattern with Tamilnadu, distribution pattern also will have to be changed accordingly. Executive Engineer shall be the final authority to manage such situations on the spot. The resulting changed pattern of supply shall be informed to the PAC at the earliest for its consideration.

8. Salient features of Chitturpuzha Irrigation Project :—

#### **I Moolathara Regulator**

- (a) Location:
  - (i) Longitude : 76°53'E
  - (ii) Latitude : 10°40'N
- (b) District : Palakkad
- (c) Taluk : Chittur
- (d) Village : Moolathara
- (e) Full reservoir level : +184.405 metres.
- (f) No. of vents/gates : 13 Nos. (7 Nos. 9.14 m span  
6 Nos. 6.10 m span)
- (g) Storage capacity at FRL : 0.538 Mm<sup>3</sup>

#### **II Moolathara Left Bank Canal System**

- (a) High level canal
  - Length : 7.000 km
- (b) Kambalathara, Eri.
  - Storage capacity : 3.00 Mm<sup>3</sup>
- (c) Left bank main canal system
  - Length of main canal : 19.720 km.

#### **III Moolathara Right Bank Canal System**

- Length of main canal : 15.957 km.

**IV Kunnamkattupathy Canal System**

- (a) Kunnamkattupathy Anicut
- (b) Kunnamkattupathy canal
  - Length of main canal : 30.600 Km.
- (c) Kunnampidari Eri-Storage capacity 0.833 Mm<sup>3</sup>
- (d) Vandithodu system

**V Thembaramadakku Canal System**

- (a) Thembaramadakku Anicut
- (b) Thembaramadakku canal
  - Length of main canal : 9.600 Km.
- (c) Mullanthodu System

**VI The Nurnee Canal System**

- Length of main canal : 12.000 Km.

**VII Nurnee-Alankadavu Canal System**

- Length of main canal : 4.000 Km.

**VIII Meenakshipuram Lift Irrigation System**

- Length of main canal : 5.100 Km.

**IX Venkalakayam Reservoir**

- Storage Capacity : 3.00 Mm<sup>3</sup>.

**X Kunnampidari Eri**

- Storage Capacity : 30.833 Mm<sup>3</sup>.

**9. Crop Pattern**

The main crops raised in the project area are :

- (a) Paddy with two crops in a year.
  - 1. First Crop (Virippu)
    - Crop duration 120 days (middle of May to middle of September)
  - 2. Second Crop (Mundakan)
    - Crop duration 135 days (middle of September to End of January)
- (b) Coconut, Ground Nut, Vegetables, Cotton etc. (in ayacut of Meenakshipura Lift Irrigation System and Moolathara Right Bank Canal)

The first crop of groundnut, vegetables and cotton can be phased in between May and September as rain fed crop and second crop using canal irrigation shall be harvested before the end of January. The Coconut Cultivators should utilize their own source of water from February to May using groundwater recharged during canal irrigation season. All cultivation using canal irrigation are expected to end by 31st January. Any water available beyond 31st January in this system shall be distributed to the essential areas judiciously by the Executive Engineer.

The Executive Engineer may review the crop pattern wherever necessary in consultation with the Department of Agriculture and Irrigation pattern may be modified suitably with concurrence of the Project Advisory Committee.

#### 10. *Distribution System of Irrigation*

(1) Since the supply pattern in Chitturpuzha system is such that the quantity released is, varying during a fortnight, for ensuring equitable distribution of water for paddy lands especially at the tail end reaches a general pattern of turn system & crop calendar for the year shall be decided by the Project Advisory Committee.

(2) In case necessity arises for any change in the turn system, the same shall be adapted for supply of Irrigation water in the fields by the approval of Project Advisory Committee.

(3) If there are any complaints or grievances from farmers, they can approach Canal Committee. If no solution is found at canal committee it shall be addressed to Project Advisory Committee. The PAC shall give a final decision on the issue.

#### 11. *Regulation of distribution system of Irrigation.*

(a) The Executive Engineer shall be the controlling officer of the project.

(b) The day to day regulation and supply of water for irrigation shall be controlled by the Assistant Executive Engineer.

(c) The day to day regulation of the sluice and the supply of water in the canals shall be the responsibility of the Assistant Engineers under the guidance of Assistant Executive Engineer.

(d) The entire distribution system shall be sub-divided into sub sections in charge of Overseers. The canal Overseers shall be assisted by Lascars/Canal Watchman in the distribution of water, maintenance and upkeep of canals.

(e) The duties and responsibilities of Officers will be the same as outlined in the PWD Manual. The duties for the Lascars are enumerated in the diary prescribed and approved by the Government.

(f) The Executive Engineer shall be the authority to propose the change in the supply pattern, turn system etc. in the distribution system. As the supply of water at Manakadavu for utilization to Chitturpuzha Project is governed by the Inter State Agreement, prior approval of the Joint Water Regulation Board (Parambikulam-Aliyar Project) is necessary to get the supply pattern modified.

(g) The ryots shall follow the prescribed crop pattern and adhere to the time schedule in various canals during different crop periods. If the crop pattern adopted for the project is not adhered to by cultivators, the project authorities shall not be bound to supply water to these fields and shall not be held responsible for the consequent damages.

(h) No Officer in Charge of regulation and distribution will leave the duty place without entrusting his charge to other responsible Officers and without intimation to his Superior Officers.

(i) The Executive Engineer shall have full powers to suspend, amend and modify any or all of the above rules temporarily in case of an emergency with due regard to public interest when safety of canals or structures are in danger. He may inform his superior officers about the emergency with details of action taken by him at the earliest opportunity. In the normal course water distribution will be as per these rules.

(j) As stated earlier, the project has no storage reservoir and the ayacut is entirely dependent on the release of water from Tamil Nadu as per PAP agreement. If all the release of water is found in excess of the requirement of ayacut, the excess water has to be stored in the small storages viz. Venkalakayam Eri, Kambalathara Eri, Kunnampidari Eri etc. which are connected to the canal systems. During the course of crop period, occasions are likely when the quantity of water supplied from Tamil Nadu is inadequate to meet the demand of the ayacut. In such circumstances, these storages have to be utilized to meet the deficit to a certain extent.

(k) Executive Engineer shall direct the Engineers concerned in charge of Moolathara regulator and balancing reservoirs that as and when the flow in the river is in excess over the requirement for the ayacut, the excess water is lead into Kambalathara Eri, Venkalakayam Eri, Kunnampidari Eri, and other storage tanks. The Assistant Engineers concerned shall also see that all reservoirs under their control are kept full during monsoon period. The fact of replenishment of these reservoirs shall invariably be reported immediately to their superiors.

(l) Water distribution shall start from the tail end of main canal and branches, and the sluice opening shall be regulated with due regard to the extent of the spout war ayacut.

(m) The turn system in the canal shall be as per approved schedule accepted by Project Advisory Committee during that particular water distribution year. But the Assistant Executive Engineer shall be competent to order a deviation upto 3 days and the Assistant Engineer for a day duly intimating the reason thereof to his immediate superior officer. Further deviation shall be made only with the approval of the Executive Engineer.

## *12. Regulation of Moolathara Regulator gates*

(a) Assistant Executive Engineer in charge of head work shall be primarily responsible for the operation of the gates and the canal head regulators and for sending timely reports. He will be assisted by Assistant Engineer, an Overseer, a Mechanical Operator and an Electrical Operator for day to day operation and maintenance. The head works shall be under strict watch throughout 24 hours of the day.

(b) The daily discharge details into the canal and to the river downstream shall be reported to the Assistant Executive Engineer and the Executive Engineer by the Assistant Engineer in the prescribed proforma. He shall also maintain an annual discharge register and an annual service register of the head works.

(c) The gauge reading at Manakkadavu shall be taken by JWR Division at three times a day (8 a.m., 1 p.m. and 6 p.m.) and the same reported to the Assistant Engineer in charge of Moolathara Regulator. The reading shall be entered in the discharge register kept in his custody. The daily discharge reports shall be posted to the Assistant Engineer and Assistant Executive Engineer by the Overseer. The Assistant Engineer shall release water through the right bank canal sluice and left bank canal sluice as per the pattern approved by the Assistant Executive Engineer. The Operator at Moolathara, shall be responsible for recording the gauge reading at Moolathara. The gauges of the reservoir, R. B. Canal, L. B. Canal and Opening of regulator shall be read at 8 a. m., 1 p. m. and 6 p. m. and entered in the register maintained for the purpose.



(d) There are four canal systems downstream of Moolathara regulator. The flow downstream is picked up by weirs to divert the flow to Kunnamkattupathy, Themabaramadakku, Nurnee and Nurnee Alankadavu canal systems. The ayacut of Nurnee and Nurnee Alankadavu system are also small enough to be fed by the perennial flow in the river and supplemented by the residual flow from Vembra, Melepudusseri and Alayar branches of L.B. Canal. The flow for the downstream system shall be supplemented by opening the regulator gates. Themabaramadakku and downstream systems can also be fed through Venkalakayam in case of emergency. The crest gates of the river shall be regulated so that water is never allowed to spill over the gate.

(e) When the overseer/Lascar at Manakkadavu notices appreciable increase in water level at Manakkadavu gauging station, he shall immediately phone up the Operator/Overseer at Moolathara and Assistant Engineer. The Operator at Moolathara shall immediately set opening at Moolathara so as to draw the flood discharge to the required quantity in the high level canal and the balance to be released downstream. The opening of gates shall start from the central span to either sides, the difference in opening ranging from 20 to 40 cm. between adjacent spans. The scour vents shall be operated in high floods.

(f) Venkalakayam reservoir shall be kept full from 16th May to 15th January by release of water from Kambalathara Eri. To ensure the maximum utilization of flood water the water level at Kambalathara shall be kept at 177.00m during the rainy season. This is just to feed the maximum discharge into the L.B. Canal beyond Kambalathara Eri. In other words the shutters of the surplus of the Eri will be kept open fully. The level of the Eri will be progressively brought to +181.080m by the time of monsoon. Kambalathara Eri should be treated as a continuation of Moolathara reservoir. The Kunnampidari Eri shall also be filled through the surplus at the 10th Km. of Moolathara R. B. Canal whenever possible.

(g) There is a regulator upstream of Kunnamkattupathy weir to feed the drinking water schemes of Kerala Water Authority. This regulator can be utilised for storing the intermittent inflows from the areas downstream of Moolathara regulator. This can be operated for meeting the fluctuations in the discharge of canals situated downstream upto 31st January. On 31st January the storage of regulator shall be maintained at FRL as a reserve for the drinking water scheme.

### 13. *Flood warning procedures*

The following procedure shall be followed in giving flood warning.

(a) In times of flood, warnings are received by the District Collector and the Executive Engineer, from the authorities of the P.A.P. The Executive Engineer on receipt of this has to intimate Assistant Executive Engineer and Assistant Engineer about this flood warning. Even if no warning is received from P.A.P., the Assistant Engineer shall be responsible for getting the information from Manakkadavu weir and giving flood warning when it is observed that the in-flow is in such a rate as to cause flood in the river. Only the surplus water shall be released by opening the gates until closure notices is received from Kambalathara. When flood waters are released through the gates, advance information/notice shall be given to Overseer/Lascars of downstream system.

(b) The Assistant Executive Engineer in charge of head works shall inform the District Collector and Executive Engineer over phone and confirm by phonogram/fax about the possible floods. When the river is in spate, phonogram/telegram/phone shall be given to the District Collector, Palakkad and the Tahsildar, Chittur and the Circle Inspector of Police, Chittur as follows:—

(c) The District Collector, Palakkad shall be primarily responsible for taking necessary steps to alert the people residing in the low lying places in the river valley and for taking necessary precautionary measure for safe-guarding life and property.

(d) The flood level of both upstream and downstream shall be observed hourly and recorded in the register by the Assistant Engineer. The flood discharge shall be computed, recorded and submitted to the Assistant Executive Engineer and the Executive Engineer. During floods the Assistant Executive Engineer also shall closely watch the flood level of the river at Moolathara. As there are no facilities for storing the flood waters of Chitturpuzha, the Assistant Executive Engineer should judiciously take action to store the maximum surplus flood water in the available small Eris.

(e) As the flood subsides, the crest gates shall be lowered and F.R.L. of reservoirs maintained. The sequence of operation for opening shall be from the centre towards both sides and for closing vice-versa.

#### 14. *Inspection and maintenance of Irrigation works*

(a) The Officers in charge shall inspect the canals and structures as often as possible and as required by the calls of duty for the efficient and effective operation and maintenance of the canal/structures. However the following frequency of inspection may be considered as the minimum by the respective officers.

<i>Officers</i>	<i>Details of works of Inspection</i>	<i>Frequency of inspection</i>
Assistant Engineer	All distributories, branches and main canals with structures	Once in a week
Asst. Exe. Engineer	Branches and main canals with structures	Once in a week/ month
Executive Engineer	Main canal and important structures	Twice during one irrigation season

(b) The Watchman/Lascar shall inspect the entire length of canal and all structures in his jurisdiction daily and keep the canal and structures in good repairs. Care should be taken to see that all the structures are maintained in a safe condition and according to a preconceived maintenance schedule. Particular attention should be paid to places where signs of weakness are noticed. The Overseer shall note his reports in his diary, daily and observations of importance made with remarks and instructions. The Overseer shall send a weekly abstract of the diary to the Assistant Engineer and the Assistant Executive Engineer.

(c) The annual maintenance of canals and structures shall be made during non-irrigation season. However, silt removal shall be attended immediately after the rain. The maintenance should include all items of routine maintenance such as jungle clearance, silt clearance etc. and in addition, provision for strengthening weak bank after a thorough and careful examination of the works concerned. Removal of growth of vegetation in masonry structures and on lining should not be postponed for annual maintenance period only. This shall be got removed by the lascar as a part of his regular duty. Whenever there is excessive silting or scouring observed, corrective steps may be taken up. Structures shall be checked for development of creep, chocking of water way etc. These shall be taken up for special repair during the closure period. Urgent minor repairs can be attended

without disturbance in the distribution schedule.

(d) Urgent repairs such as closure of breach of bund, rectification of failure of structure etc. shall be carried out on closing the canal by concerned Irrigation Officers at site under intimation to his superior officer. The Assistant Executive Engineer shall give wide publicity about such emergency among cultivators by all possible means. Except during an emergency a canal shall not be closed without the specific approval of the Executive Engineer.

(e) The Assistant Engineer and the Assistant Executive Engineer shall inspect Moolathara regulator regularly for verification of periodical repairs and lubrication. Painting of the shutter shall be done during the period available from April 1st to May 15th. The working of the gates and hoist mechanism shall be checked in the presence of the Assistant Executive Engineer without much loss of water. A quarterly report on the maintenance with a check slip shall be prepared by the Assistant Engineer and an annual one prepared by the Assistant Executive Engineer shall be submitted to his immediate superior Officer.

#### 15. *Special Features and Precaution of Head works*

(a) No person should be allowed to go near the operating mechanism without the operator or his superior Officer.

(b) A date-wise service register of record of maintenance operation as per schedule and any other repairs carried out should be maintained.

(c) Any un-usual phenomenon such as excessive vibration, noises etc, should be recorded and faults and damages reported to competent authority for rectification.

(d) Adequate stock of spare parts required for immediate replacement and necessary tools shall be kept in the custody by the Assistant Engineer.

(e) In the absence of the power supply, arrangements for hand operation shall be made by the Assistant Engineer under intimation to the Assistant Executive Engineer and Executive Engineer.

(f) A generator is installed at the regulator site to produce electricity for the operation of the spillway gates in case of failure of power supply from Kerala State Electricity Board. To make sure that the generator works in times of need, the Assistant Executive Engineer should see that test run is done for the generator one hour every week and a log book of such working is maintained.

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